REMARKS

Claims 1 to 52 are currently pending. Claims 7-15, 33-41, and 51-52 have been cancelled, and new claim 53 has been added. Claims 1, 22, 27, 46, and 48 have been amended. Claims 1, 22, 27, 46, and 48 have been amended to specify the absorbency-enhancing additive. Support for these amendments can be found in the Specification at page 10, line 35 to page 11, line 6, which lists representative examples of absorbency-enhancing additives. Claim 27 has also been amended to change the weight ratio of ionic superabsorbent polymer to absorbency-enhancing additive from at least about 1:2 to at least about 1:1. Support for this amendment can be found in the Specification at page 12, lines 21-26.[1] Support for new claim 53 can be found in original claim 27.

Amendment to the Specification

The paragraph beginning on page 12, line 18 has been amended to change the sentence "Weight ratios of absorbency-enhancing additives to superabsorbent polymers can also be 1:3, 1:4, or even 1:5 or greater..." to "Weight ratios of superabsorbent polymers to absorbency-enhancing additives can also be 1:3, 1:4, or even 1:5 or greater..."

This is an amendment to correct an obvious error in the specification, and thus does not constitute new matter.[2] It is

[1] "[T]he ionic superabsorbent polymer material is combined with an amount of absorbency-enhancing additive at least equal (by weight) to the amount of superabsorbent polymer; that is, there is at least as much absorbency-enhancing additive present as ionic superabsorbent polymer."

[2] "An amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only

clear from the specification that the compositions and products of the present invention preferably comprise more absorbency-enhancing additive than superabsorbent polymers; the amendment reflects this. Numerous places throughout the Specification indicate that the absorbency-enhancing additive is present in an equal or greater amount (by weight) than superabsorbent polymer material. For example, the Specification describes a ratio of superabsorbent polymer to absorbency-enhancing additive (such as glycine) of 1:2 (or greater) at page 4, lines 27-31;[3] page 12, lines 18-20; page 12, line 30 to page 13, line 1; page 14, lines 14-17; page 14, lines 30-31; page 15, lines 19-21; Example 1, page 20, lines 3-6; Example 3, page 23, lines 16-17; Example 4, page 26, lines 16-18; and claims 17, 18, 22, 43, 44, 46, and 48.

<u>1. Rejections Under 35 U.S.C. §102(b) (¶2)</u>

Reconsideration is requested of the rejection of claims 1, 4, 7-30, 33-42, 45, and 48-52 under 35 U.S.C. §102(b) as being anticipated by Hansen, et al. (U.S. Patent No. 5,998,032).

Hansen, et al. disclose compositions containing superabsorbent materials and enhancing agents which serve to

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recognize the existence of error in the specification, but also the appropriate correction." MPEP §2163.07(II).

[3] "[T]he weight ratio of ionic superabsorbent polymer to absorbency-enhancing additive is at least about 1:1, and preferably at least about 1:2 so that there is at least an equal amount of absorbency-enhancing additive and ionic superabsorbent polymer." *See also* Specification, p. 12, ln. 21-26 ("[T]he ionic superabsorbent polymer material is combined with an amount of absorbency-enhancing additive at least equal (by weight) to the amount of superabsrobent polymer; that is, there is at least as much absorbency-enhancing additive present as ionic superabsorbent polymer.").

enhance the blood absorbent properties of the superabsorbent materials. The enhancing agents may also be used on fibrous materials, as opposed to superabsorbent material, and the enhancing agent-treated fibrous material can be used in combination with superabsorbent materials to form an absorbent composition. The enhancing agents can be polymeric enhancing agents, non-polymeric enhancing agents, or combinations thereof. Examples of suitable non-polymeric enhancing agents include taurine, and amino acids such as glycine and β-alanine. Significantly, the absorbent compositions of Hansen, et al. comprise substantially more suberabsorbent material than enhancing agent.

Claim 1 as amended herein is directed to an absorbent composition for absorbing an aqueous salt solution. The absorbent composition comprises an ionic superabsorbent polymer material and an absorbency-enhancing additive in a weight ratio of at least about 1:1. The additive is selected from the group consisting of glycine, alpha-alanine, beta-alanine, betaine, and taurine.

Hansen, et al. do not teach or describe each and every element of claim 1.[4] Specifically, and in contrast to the Office's assertion, Hansen, et al. do not describe an absorbent composition comprising an ionic superabsorbent polymer material

[4] MPEP § 2131 states that a claim is anticipated under 35 U.S.C. §102 only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

and an absorbency-enhancing additive in a weight ratio of at least about 1:1;[5] this is a requirement of claim 1.

Hansen, et al. give several exemplary ranges for the amount of polymeric or non-polymeric enhancing agent that may be used in the compositions described. For example, a polymeric enhancing agent "suitably is present in an amount of at least about 0.01%, and ***no more than about*** 10%, by weight of the particles ('percent by weight')."[6] Hansen, et al. thus specifically state that the maximum amount of polymeric enhancing agent that can be present in the absorbent composition is about 10% by weight of the superabsorbent particles; this results in a 1:10 enhancing agent to superabsorbent particle ratio, as discussed below. Furthermore, it is clear from Hansen, et al. that the lower amounts of enhancing agent within the stated range are preferred.[7] Similar numbers are provided for non-polymeric

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[5] While the Office has stated that Hansen, et al. disclose absorbent compositions comprising an ionic super-absorbent polymer material and an absorbency enhancing material in amounts that would result in a weight ratio of polymer to absorbency enhancing material of 1:1, the Office has not indicated where in Hansen, et al. such a ratio is disclosed. The general citations to Hansen, et al. that are provided by the Office do not disclose a ratio of superabsorbent material to enhancing agent of at least about 1:1.

[6] U.S. Patent No. 5,998,032 at col. 22, ln. 11-13 (emphasis added). *See also id.* at col. 3, ln. 41-44 ("the polymeric enhancing agent is present in an amount ranging from about 0.01% to about 3% of the weight of the superabsorbent material; more preferably about 0.01% to about 1.0%").

[7] "In preferred embodiments, the polymeric enhancing agent is present in an amount of about 0.01% to about 8%, more preferably about 0.01% to about 3%, and even more preferably about 0.01% to about 1% by weight of the particles." *Id.* at col.

enhancing agents.[8] As such, Hansen, et al. clearly require substantially more superabsorbent particles than enhancing agent (whether polymeric or non-polymeric).

Even if the highest amount of enhancing agent disclosed by Hansen, et al. is utilized, the compositions of Hansen, et al. still do not comprise a superabsorbent material and absorbency-enhancing additive in a weight ratio of at least about 1:1 (or more enhancing additive). In fact, in contrast to the requirements of claim 1, the compositions of Hansen, et al. comprise <u>significantly more superabsorbent material than enhancing agent</u>. A ratio of superabsorbent particle (SAP) to enhancing agent (EA) in the compositions of Hansen, et al. can be calculated using the disclosed amounts of enhancing agent. For illustrative purposes, assume 100 g SAP. If the enhancing agent is present in an amount of 10% by weight of the SAP (the maximum amount of enhancing agent disclosed in Hansen, et al.), this equates to 10g EA (10% x 100g = 10g). The ratio of EA:SAP is thus 10g:100g, or 1:10. This is a significantly higher amount of SAP (as compared to EA) than is present in the required composition of claim 1.

22, ln. 13-17.

[8] "The nonpolymeric enhancing agent suitable is present in an amount of at least about 0.01% and ***no more than about 10%***, by weight of the superabsorbent particles. In preferred embodiments, the nonpolymeric enhancing agent is present in an amount of about 0.01% to about 8%, more preferably about 0.01% to about 3%, and even more preferably about 0.01% to about 1% by weight of the superabsorbent particles. In particularly preferred embodiments, wherein the nonpolymeric enhancing agent is glycerin, the amount used is about 0.05% to about 0.1% by weight of the superabsorbent particles." *Id.* at col. 22, ln. 32-42 (emphasis added). *See also id.* at col. 5, ln. 33-36.

Furthermore, a close review of the Examples in Hansen, et al. notes that none describe an absorbent composition comprising a superabsorbent material and absorbency-enhancing additive in a weight ratio of at least about 1:1 (or more enhancing additive). Example 1 of Hansen, et al. describes treating a superabsorbent particle (polyacrylate hydrogel superabsorbent) with an enhancing agent (glycerin). Glycerin is added to a suspension of the superabsorbent material "in amounts sufficient to produce addition levels of 0.1%, 0.5%, and 2.0% of the total weight of the superabsorbent material and the added glycerin."[9] Calculating the ratio of superabsorbent material to enhancing agent using the maximum amount of enhancing agent (2.0% of the total weight of superabsorbent material and added glycerin), results in a ratio of EA:SAP of 1:49.[10]

Example 1 also describes the preparation of a composite of polyacrylate hydrogel superabsorbent and a cellulose fiber fluff, the fluff at least partially coated with glycerin in accordance with Example 5 (fluff coated with glycerin in the amount of 9% by weight, based on the total weight of the fiber and the glycerin). 30% by weight superabsorbent particles based on the combined weight of the superabsorbent particles and the fibrous material is used.[11] In calculating the ratio of superabsorbent material to enhancing agent for this composite, assume a SAP/treated fiber

[9] *Id.* at col. 37, ln. 29-31.

[10] For illustrative purposes, assume a sample of 100g (SAP plus EA). The amount of enhancing agent would be 2g (2% times 100g = 2g), and the amount of SAP would be 98g. The ratio of EA:SAP would thus be 2g:98g, or 1:49, significantly more SAP than required by claim 1.

[11] The resulting sample was designated 30% IM 1000/RP fluff.

composite of 100g. If there is 30% by weight superabsorbent particles based on the combined weight of the superabsorbent particles and the treated fibrous material, there would be 30g SAP and 70g treated fiber (i.e., the coated fiber from Example 5). Since the treated fiber from Example 5 is 9% by weight enhancing agent, based on the total weight of the fiber and the enhancing agent, the fibers would be about 6.3g of enhancing agent (9% EA times 70g treated fiber = 6.3g EA) and 63.7g fiber. The ratio of EA:SAP would thus be 6.3g:30g, or approximately 1:4.76. This is still a significantly higher percentage of superabsorbent material than in the absorbent compositions of claim 1.

The samples of Example 2 were prepared in accordance with Example 1, except that the particular enhancing agent used was different.[12] In a similar manner, the samples of Example 3 were prepared by combining a superabsorbent material with 0.5% glycerin enhancing agent as described in Example 1. The samples of Examples 2 and 3 thus, like the samples of Example 1, comprise substantially more superabsorbent material than enhancing agent.

In Example 4, Hansen, et al. attempt to identify an optimum level of addition of a glycerin enhancing agent to a superabsorbent particle. The composition of the samples prepared in Example 4 are shown in Table 4. The maximum percentage of enhancing agent in any of the prepared samples was 0.5%, which

[12] As is illustrated in Table 2, the samples of Example 2 comprised enhancing agent in an amount of 0.5% of the total weight of the superabsorbent material and the added enhancing agent, which is less than the maximum amount of 2.0% used in Example 1.

equates to an EA:SAP weight ratio of 1:199.[13] Hansen, et al. further state that "[t]he results indicate that the optimum range for improving the blood absorbent capacity of the [ ] superabsorbent particle by treatment with glycerin enhancing agent lies somewhere in the range of less than 0.1%."[14] As can be seen from the above calculations, this is significantly more superabsorbent material than enhancing agent.

As previously discussed, Example 5 describes the application of enhancing agent (glycerin) to a cellulose fiber fluff, wherein the enhancing agent is applied to the fiber in the amount of 9% by weight, based on the total weight of the fiber and the enhancing agent. 5.2g of the treated fluff was blended with a 2.23g sample of commercially available superabsorbent particles. Applying a calculation similar to that described above, this equates to an EA:SAP weight ratio of 1:4.76.[15]

In Example 6, samples were prepared by adding superabsorbent particles to the treated fluff from Example 5 in an amount sufficient to produce 30% and 45% by weight of the combined weight of the fibers and the superabsorbent particles. As previously calculated, a sample comprising 30% by weight of superabsorbent particles, and the treated fluff of Example 5 has

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[13] Again, for illustrative purposes, assume a 100g sample (EA plus SAP). The sample would comprise 0.5g enhancing agent (0.5% times 100g = 0.5g EA) and 99.5g SAP. The ratio of EA:SAP would thus be 0.5g:95.5g, or 1:199.

[14] *Id.* at col. 41, ln. 37-40.

[15] Since the treated fluff is 9% glycerin by weight, based on the total weight of the fiber and the glycerin, and there is 5.2g of treated fluff, the treated fluff contains 0.468g glycerin (9% times 5.2g = 0.468g). The ratio of EA:SAP in the samples of Example 5 would thus be 0.468g:2.23g, or approximately 1:4.76.

a weight ratio of EA:SAP of approximately 1:4.76. A sample with 45% superabsorbent would contain even more superabsorbent material relative to enhancing agent.

In light of the foregoing, it is clear that Hansen, et al. do not describe each and every element of claim 1. Specifically, Hansen, et al. do not disclose an absorbent composition comprising an ionic superabsorbent polymer material and an absorbency-enhancing additive in a weight ratio of at least about 1:1, as is required by claim 1. In direct contrast, the absorbent compositions disclosed in Hansen, et al. all contain significantly more superabsorbent material than enhancing agent. Since Hansen, et al. do not anticipate claim 1, applicants request the rejection of claim 1 under 35 U.S.C. §102(b) be withdrawn.

Claim 22 is directed to an absorbent composition for absorbing an aqueous salt solution. The absorbent composition comprises poly(acrylic acid) (a superabsorbent polymer material) and an absorbency-enhancing additive selected from the group consisting of glycine, alpha-alanine, beta-alaline, betaine, and taurine. The weight ratio of poly(acrylic acid) to absorbency-enhancing additive is at least 1:2.

In contrast to the requirements of claim 22, as previously discussed, the compositions of Hansen, et al. contain significantly more superabsrobent material than enhancing agent. Hansen, et al. can thus not be said to anticipate claim 22. Applicants therefore request the rejection of claim 22 under 35 U.S.C. §102(b) be withdrawn.

Claim 27 is directed to a process for increasing the osmotic activity of an ionic superabsorbent polymer material in the presence of an aqueous salt solution. The process comprises

combining an absorbency-enhancing additive with the ionic superabsorbent polymer material prior to contacting the ionic superabsorbent polymer with the aqueous salt solution. The weight ratio of the ionic superabsorbent polymer to the absorbency-enhancing additive is at least about 1:1, and the additive is selected from the group consisting of glycine, alpha-alanine, beta-alanine, betaine, and taurine.

As discussed above for claim 1, Hansen, et al. do not describe combining an absorbency-enhancing additive with a superabsorbent material in a weight ratio of superabsorbent polymer to absorbency-enhancing additive of at least about 1:1. In contrast, the absorbent compositions of Hansen, et al. comprise a greater percentage of superabsorbent material than enhancing agent. Since Hansen, et al. do not anticipate claim 27, applicants request withdrawal of the rejection of claim 27 under 35 U.S.C. §102(b).

Claim 48 is directed to a composite product for absorbing an aqueous salt solution. The product comprises an absorbent composition comprising an ionic superabsorbent polymer material, fluff fiber, and an additive. The weight ratio of the ionic superabsorbent polymer to the absorbency-enhancing additive is at least 1:2, and the additive is selected from the group consisting of glycine, alpha-alanine, beta-alanine, betaine, and taurine.

Hansen, et al. describe compositions comprising fibrous material, enhancing agent, and superabsorbent material. However, as previously discussed, none of these compositions have a weight ratio of superabsorbent material to enhancing agent of 1:2, but rather, comprise a larger percentage of superabsorbent material than enhancing agent. Since Hansen, et al. do not anticipate

claim 48, applicants request withdrawal of the rejection of claim 48 under 35 U.S.C. §102(b).

Claims 4 and 16-21 depend either directly or indirectly from claim 1; claims 23-26 depend from claim 22; claims 28-30, 42, 45, and new claim 53 depend either directly or indirectly from claim 27; claims 49 and 50 are dependent on claim 48. Claims 4, 16-21, 23-26, 28-30, 42, 45, 49-50, and 53 are thus patentable for the same reasons as set forth above for the claims from which they depend, as well as for the additional elements they require. Claims 7-15, 33-41, and 51-52 have been cancelled.

2. Rejections Under 35 U.S.C. §102(e) (¶3-4)

Reconsideration is requested of the rejection of claims 1-52 under 35 U.S.C. §102(e) as being anticipated by Wallajapet, et al. (U.S. Patent No. 6,639,120).

Wallajapet, et al. disclose an absorbent structure comprising a water-swellable, water-insoluble polymer (such as one prepared from polyacrylic acid, etc.) with either acidic or basic functional groups; a basic or acidic second material; and optionally a buffering agent (e.g. α-alanine, glycine, etc.). The absorbent structure is able to absorb a large quantity of liquid while maintaining a substantially desired and balanced pH profile on or along the upper surface of the absorbent structure. The functional groups on the water-swellable polymer are beneficially at least about 50 molar percent in free acid or free base form. When the mixture is placed in an aqueous solution, the water-swellable polymer and the second material react, and the water-swellable polymer is converted from its free acid or base form to its respective salt form. The mixture will then exhibit a relatively high capacity for liquid absorption. The

molar ratio of the water-swellable polymer to the second material is from about 10:1 to about 1:10, and most suitably is about 1:1.

Wallajapet, et al. do not describe each and every element of amended claim 1. Specifically, Wallajapet, et al. do not describe an absorbent composition comprising an ionic superabsorbent polymer material and glycine, alpha-alanine, beta-alanine, betaine, or taurine in a weight ratio of at least about 1:1.

As previously discussed, Wallajapet, et al. describe both absorbent structures comprising an acidic water-swellable, water-insoluble polymer and a basic second material, as well as absorbent structures comprising a basic water-swellable, water-insoluble polymer and an acidic second material. Although Wallajapet, et al. give several examples of suitable acidic[16] and basic[17] second materials, glycine, alpha-alanine, beta-alanine,

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[16] "Examples of suitable acidic second materials include, but are not limited to, polymeric acidic materials such as polyacrylic acid, polymaleic acid, carboxymethyl cellulose, alginic acid, polyaspartic acid, and polyglutamic acid; organic acidic materials such as alphatic and aromatic acids, such as citric acid, glutamic acid, and aspartic acid; inorganic acids such as metallic oxides, such as aluminum oxide; salts such as iron chloride, calcium chloride, and zinc chloride; and mixtures thereof." U.S. Patent No. 6,639,120, at col. 11, ln. 57-65.

[17] "Examples of suitable basic second materials include, but are not limited to, polymeric basic materials such as polyamines, polyimines, polyamides, polyquatemary ammoniums, chitins, chitosans, polyasparagines, polyglutamines, polylysines, and polyarginines; organic basic materials such as organic salts such as sodium citrate and aliphatic and aromatic amines, imines, and amides; and inorganic bases such as metallic oxides, such as calcium oxide and aluminum oxide; hydroxides, such as barium hydroxide; salts such as sodium carbonate, sodium bicarbonate, and calcium carbonate; and mixtures thereof." *Id.* at col. 10,

betaine, and taurine are <u>not</u> listed among them. It is thus immaterial that the molar ratio of water-swellable, water-insoluble polymer to second material may be from about 10:1 to about 1:10, and most suitably at about 1:1, since glycine, alpha-alanine, beta-alanine, betaine, and taurine are not disclosed by Wallajapet, et al. as suitable acidic or basic second materials.

As previously discussed, the absorbent structures of Wallajapet, et al. may optionally contain a buffering agent. Wallajapet, et al. list several examples of suitable buffering agents, including alpha-alanine and glycine, among others.[18] However, Wallajapet, et al. specifically state that the molar ratio of acidic or basic water-swellable, water-insoluble polymer and buffering agent is beneficially between about 50:1 to about 2:1.[19] Similar numbers are given for the ratio of acidic or basic second material to buffer.[20] The absorbent structures of Wallajapet, et al. would thus contain substantially more absorbent material than buffer (e.g. glycine or alpha-alanine). This is in contrast to claim 1 which, as previously discussed,

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ln. 20-30.

[18] *Id.* at col. 18, ln. 56 to col. 19, ln. 20.

[19] "In general, the amount of buffering agent used in the absorbent structure is such that the molar ratio between the acidic or basic water-swellable, water-insoluble polymer and the buffering agent is beneficially between about 50:1 to about 2:1, more beneficially between about 40:1 to about 4:1, suitably between about 30:1 to about 6:1, and more suitably between about 20:1 to about 10:1." *Id.* at col. 19, ln. 44-51.

[20] *See, id.* at col. 19, ln. 51-57 (stating that the molar ratio between the basic or acidic second material and the buffering agent in the absorbent structure is beneficially between about 50:1 to about 2:1).

requires a weight ratio of ionic superabsorbent polymer material to absorbency enhancing additive (e.g. glycine, alpha-alanine, etc.) of at least about 1:1 (or more additive).

In addition to the foregoing, applicants note that one skilled in the art must pick and choose from several options in Wallajapet, et al. to arrive at an absorbent composition comprising a superabsorbent polymer material and an absorbency enhancing additive, such as glycine or alpha-alanine. Specifically, one skilled in the art would have had to first decide to include an optional buffering agent in the absorbent composition, and choose to make that buffering agent a basic buffering agent.[21] After deciding to include the basic buffering agent, one skilled in the art would then have had to choose either alpha-alanine or glycine from a laundry list of about 12 basic buffering agents provided by Wallajapet, et al. Thus, at a minimum, one skilled in the art must choose three optional embodiments from Wallajapet, et al. and combine these optional embodiments with a superabsorbent polymer material to arrive at an absorbent structure comprising a superabsorbent polymer material and glycine or alpha-alanine. Even if all these optional combinations are made, at this point, one skilled in the art would still not have arrived at the absorbent structure of claim 1, which further requires that the superabsorbent polymer material and absorbency enhancing additive be present in a weight ratio of at least about 1:1, since, as previously discussed,

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[21] Applicants note that the buffering agents described in Wallajapet, et al. may be acidic or basic. The buffering agent would then have to be selected from a list of about 29 acidic or basic buffering agents. *Id.* at col. 18, ln. 56 to col. 19, ln. 20.

Wallajapet, et al. disclose the molar ratio between the water-swellable, water-insoluble polymer and the buffering agent to be about 50:1 to about 2:1.

In light of the foregoing, it is clear that Wallajapet, et al. do not describe each and every element of amended claim 1. Specifically, Wallajapet, et al. do not describe an absorbent structure comprising an ionic superabsorbent polymer material and glycine, alpha-alanine, beta-alanine, betaine, or taurine in a weight ratio of at least about 1:1. Since Wallajapet, et al. do not anticipate claim 1, applicants request the rejection of claim 1 under 35 U.S.C. §102(e) be withdrawn.

Likewise, Wallajapet, et al. do not describe each and every element of amended claim 22. Specifically, Wallajapet, et al. do not describe an absorbent composition comprising poly(acrylic acid) and an absorbency-enhancing additive (glycine, alpha-alanine, beta-alanine, betaine, or taurine) in a weight ratio of poly(acrylic acid) to absorbency-enhancing additive of at least 1:2.

In contrast to claim 22, as previously discussed, neither glycine, alpha-alanine, beta-alanine, betaine, or taurine are listed in Wallajapet, et al. as suitable acidic or basic second materials. Although the absorbent structures of Wallajapet, et al. may optionally contain alpha-alanine or glycine as a buffer, the buffer is beneficially present in a molar ratio of water-swellable, water-insoluble polymer or second material and buffer between about 50:1 to about 2:1. The absorbent structures of Wallajapet, et al. thus contain more absorbent material than glycine or alpha-alanine, in direct contrast to claim 22. Wallajapet, et al. can thus not be said to anticipate claim 22.

Applicants therefore request the rejection of claim 22 under 35 U.S.C. §102(e) be withdrawn.

Wallajapet, et al. also do not describe each and every element of amended claim 27, and specifically, do not describe combining an ionic superabsorbent polymer material with glycine, alpha-alanine, beta-alanine, betaine, or taurine in a weight ratio of at least about 1:1. In contrast, and as discussed above, Wallajapet, et al. only describe absorbent structures wherein the molar ratio of absorbent material (i.e. water-swellable, water-insoluble polymer) to buffer (i.e. glycine or alpha-alanine) is beneficially between about 50:1 to about 2:1. Since Wallajapet, et al. do not anticipate claim 27, applicants request withdrawal of the rejection of claim 27 under 35 U.S.C. §102(e).

In a similar manner, Wallajapet, et al. cannot be said to anticipate amended claim 48. Specifically, Wallajapet, et al. do not describe a composite product comprising an absorbent composition comprising an ionic superabsorbent polymer material, fluff fiber, and an additive (e.g. glycine, alpha-alanine, beta-alanine, betaine, or taurine), wherein the weight ratio of the ionic superabsorbent polymer to the absorbency-enhancing additive is at least 1:2. As previously discussed, the absorbent structures of Wallajapet, et al. contain more water-swellable, water-insoluble polymer or second material than buffering agent, such as alpha-alanine or glycine.[22] In direct contrast, the product of claim 48 requires more additive than ionic superabsorbent polymer material. Since Wallajapet, et al. do not

[22] *See id.* at col. 19, ln. 45-57.

anticipate claim 48, applicants request withdrawal of the rejection of claim 48 under 35 U.S.C. §102(e).

Claims 2-6, and 16-21 are dependent either directly or indirectly on claim 1; claims 23-26 are dependent on claim 22; claims 28-32 and 42-47 are dependent either directly or indirectly on claim 27; and claims 49-50 are dependent on claim 48. Claims 2-6, 16-21, 23-26, 28-32, 42-47, and 49-50 are thus patentable for the same reasons as set forth above for the claims from which they depend, as well as for the additional elements they require. Claims 7-15, 33-41, and 51-52 have been cancelled.

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PATENT

CONCLUSION

In light of the foregoing, applicants respectfully request favorable reconsideration and allowance of all pending claims. The Commissioner is hereby authorized to charge any fee deficiency in connection with this Amendment A to Deposit Account Number 19-1345 in the name of Senniger, Powers, Leavitt & Roedel.

Respectfully Submitted,

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